

REMARKS

Claims 1-38 are pending in the application. In the Office Action dated December 4, 2002, the Examiner rejected claims 1-3, 15-19, 21, 23, 25-27, 32, 33 and 35 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,793,973 to Birdwell ("Birdwell") in view of "Messaging's next blockbuster hit" by Cox. The Examiner further rejected claims 6-14 under U.S.C. § 103(a) as being unpatentable over the Birdwell reference in view of "Messaging's next blockbuster hit" and U.S. Patent No. 5,793,973 to Miyamoto ("Miyamoto"). The Examiner also rejected claims 28-31 and 36-38 under U.S.C. § 103(a) as being unpatentable over the Miyamoto reference in view of "Messaging's next blockbuster hit" by Cox. The Examiner rejected claims 20, 22 and 34 under U.S.C. § 103(a) as being unpatentable over the Birdwell reference in view of Cox as applied to claim 19 above, and further in view of Miyamoto. Finally, the Examiner rejected claims 4, 5 and 24 under U.S.C. § 103(a) as being unpatentable over Birdwell in view of Cox as applied to claim 15 above, and further in view of U.S. Patent No. 6,108,709 to Shinomura ("Shinomura"). Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

Some of the technical differences between the applied references and various embodiments of the invention will now be discussed. Of course, these discussed differences, which are disclosed in detail in the patent specification, do not define the scope or interpretation of any of the claims. Where presented below, such discussed differences merely help the Examiner appreciate important claim distinctions discussed thereafter.

The various embodiments of the present invention disclose methods and computer systems for enhancing the reliability of communication using electronic messages. In one pertinent embodiment, a method in a computer system for delivery of an electronic message includes determining whether after sending of the electronic message to a recipient a user-specified period of time has elapsed without receiving a confirmation of delivery of the electronic message to the recipient. When it is determined that the user-specified period of time has elapsed without receiving the confirmation, another electronic message is sent. In one

aspect, an electronic message can be sent with one of a plurality of priority levels. Further, the sending of the another electronic message can be performed with a higher priority level than the sending of the electronic message.

The methods and computer systems taught by Applicant advantageously allow a sender to automatically send messages to intended recipients until confirmation from the recipient is received. As a result, the reliability of electronic communications between the sender and the intended recipients is increased.

The Examiner has cited the Birdwell reference, which discloses a method and system for opportunistic broadcasting data or sending data by a point-to-point connection. Turning first to Figure 1, Birdwell discloses a server computer system (server) 102 connected to client computer systems (clients) 101 by means of a point-to-point connection 104 and broadcast transmission mechanisms 103A, 103B. When a request from several clients 101 to receive the same data is received by the server 102, the requested data can be broadcast over broadcast transmission mechanisms 103A, 103B to all of the clients 101 simultaneously, including those who did not make a request, with the intended clients actually storing and processing the data. The server 102 tracks all of the requesting clients 101 who do not confirm receipt of the downloaded data. When one of these clients 101 subsequently establishes a connection to the server 102 through the point-to-point connection 104, the client 101 may request the data to be downloaded, and the server 102 can send the client 101 a list of data for which the client 101 has not confirmed receipt. Using this list, the client can selectively request which data to download.

Birdwell does not disclose or suggest the communication methods and computer systems taught by Applicant. In particular, Birdwell *et al.* does not disclose or suggest determining whether after sending of the electronic message to a recipient a user-specified period of time has elapsed without receiving a confirmation of delivery of the electronic message to the recipient; and when it is determined that the user-specified period of time has elapsed without receiving the confirmation, sending another electronic message. Instead, Birdwell teaches resending data to a client only after the client re-establishes a connection to the server and requests the data to be downloaded. Applicant therefore submits that Birdwell *teaches away* from the method taught by Applicant, since no action is required by the recipient, but rather the

electronic message is resent automatically after a user-specified period of time has elapsed without the sender having received confirmation from the recipient.

The Examiner has further cited "Messaging's Next Blockbuster Hit" by Cox. Cox discloses a client/server messaging system. In particular, Cox teaches enabling a sender to confirm that a recipient has received a message by allowing the sender to place a request that a read receipt or a delivery notification, or both, be sent back to the sender. Such a function can be employed by the user to determine if the recipient of a message has actually opened the message or has merely received it.

Applicant notes that Cox does not remedy the above noted failed teachings of Birdwell because Cox does not teach or suggest *determining whether after sending of the electronic message to a recipient a user-specified period of time has elapsed without receiving a confirmation of delivery of the electronic message to the recipient; and when it is determined that the user-specified period of time has elapsed without receiving the confirmation, sending another electronic message*. Instead, Cox teaches that a request can be included in the message asking the recipient to return a receipt confirming that the message was received or read by the recipient. No further action is taught by Cox. Accordingly, if a recipient fails to return a receipt, no further action (such as the automatic sending of future messages as taught by Applicant) is taken.

The Examiner has also cited the Miyamoto reference for disclosing an electronic mail processing apparatus wherein a user-specified time may be set to establish a time interval for transmitting a prompting e-mail message in the event a requested response is not obtained. However, the prompting e-mail message disclosed in Miyamoto is not the initial transmission itself. Instead, Miyamoto discloses *creating* the prompting e-mail based on information in a retransmission setting memory table. The Examiner is directed to col. 11, lines 30-35 for this disclosure.

Accordingly, Miyamoto fails to provide the required teaching since it fails to disclose *when the delivery notification from the delivery recipient is not received within a user-specified period of time, resending the electronic message to the recipient*. Instead, Miyamoto discloses, at most, creating a prompting message that is different from the original message and sending the created prompting message to a non-responsive message recipient.

The Examiner has also cited the Shinomura reference. Shinomura discloses a data sending apparatus that permits an e-mail message to a first type of data terminal based upon the content of the message and selected conditions and selectively forwarding the e-mail message to a second type of data terminal. Specifically, the reference discloses sending an e-mail message to an alternate receiver when the message cannot be sent to the intended receiver. The applicant note, in particular, that the reference is directed to reconfiguring an electronic message so that it may be compatible with the data format required by the alternate receiver.

Applicant submits that the Shinomura fails to provide the disclosure missing from the other cited references.

Turning now to the claims, differences between the claim language and the applied art will be specifically pointed out. Claim 1, as amended, recites in pertinent part, "A method in a computer system for a sender of an electronic message to ensure that the electronic message is delivered to and reviewed by intended recipient users, the method comprising...composing the electronic message...indicating a plurality of intended recipient users...selecting a delivery recipient user from the intended recipient users...selecting a review recipient user from the intended recipient users...sending the electronic message to the plurality of intended recipient users...requesting from the delivery recipient user a delivery notification when the electronic message is delivered to the delivery recipient user...requesting from the review recipient user a review notification when the review recipient user reviews the electronic message... determining a delivery waiting period for receiving the delivery notification...*selecting a delivery time interval corresponding to the delivery waiting period*...determining a review waiting period for receiving the review notification *and selecting a review time interval corresponding to the review waiting period*... and...without user intervention...when the delivery notification from the delivery recipient user is not received by the sender *within the selected delivery time interval* corresponding to the delivery waiting period, resending the electronic message to the delivery recipient user...and...when the review notification from the review recipient user is not received by the sender *within the selected review time interval* corresponding to the review waiting period, sending a second electronic message to the review recipient user." (Emphasis added). The asserted prior art combination does not disclose this. Birdwell does not disclose selecting a delivery time interval that is user-

specified, and does not disclose or suggest determining whether after sending of the electronic message to a recipient a user-specified period of time has elapsed without receiving a confirmation of delivery of the electronic message to the recipient; and when it is determined that the user-specified period of time has elapsed without receiving the confirmation, sending another electronic message. Instead, Birdwell teaches resending data to a recipient only after the recipient re-establishes a connection to the server and requests the data to be downloaded. Cox further fails to provide the missing teaching, as noted above. Claim 1 is therefore allowable over the cited art. Claims depending from claim 1 are also allowable based upon the allowability of the base claim and further in view of the additional limitations recited in the dependent claims.

Claim 6, as amended, recites in pertinent part, "A method in a computer system for delivery of an electronic message, the method comprising...determining whether after sending of the electronic message to a recipient *a user-specified period of time has elapsed without receiving a confirmation of delivery of the electronic message to the recipient...and...when it is determined that the user-specified period of time has elapsed without receiving the confirmation, resending the electronic message.*" (Emphasis added). Again, the asserted combination of Birdwell and Cox does not disclose this, as noted above. The Examiner has further cited the Miyamoto reference. However, as explained in greater detail above, Miyamoto discloses *creating a reply message and sending the created message* when a confirming reply has not been received. Miyamoto does not disclose resending the originally sent message. Claim 6 is therefore allowable over the cited art. Further, claims depending from claim 6 are also allowable based upon the allowability of the base claim and further in view of the additional limitations recited in the dependent claims.

Claim 15, as amended, recites in pertinent part, "A method in a computer system for delivery of an electronic message, the method comprising...determining whether after sending of the electronic message to a recipient a pre-determined period of time has elapsed without receiving a confirmation that the recipient reviewed the sent electronic message, *the predetermined time period corresponding to a time interval selected by a sender...and...when it is determined that the period of time has elapsed without receiving the confirmation, sending another electronic message.*" (Emphasis added). Again, Birdwell does not disclose that a time interval, selectable by a user, is used to determine when another message is to be sent. Cox fails

to disclose this limitation as well. Claim 15 is also therefore allowable over the cited art. Claims depending from claim 15 are also allowable based upon the allowable form of the base claim, and further in view of the additional limitations recited in the dependent claims.

Claim 28, as amended, recites in pertinent part, "A method for a sender of an electronic message to ensure that the electronic message is reviewed by a recipient, the computer-implemented method comprising...determining whether after sending of the electronic message to a recipient a user specified amount of time has elapsed without receiving an indication that the recipient reviewed the sent electronic message...and...when it is determined that the period of time has elapsed without receiving the indication...*automatically requesting a confirmation from the sender to resend the electronic message* ...and...when the confirmation is received from the sender, *resending the electronic message*." (Emphasis added). As pointed out previously, Miyamoto does not teach resending the electronic message when a user specified period of time elapses. Claim 28 is therefore allowable over the asserted combination of Birdwell, Cox and Miyamoto. Claims depending from claim 28 are similarly allowable based upon the allowable form of the base claim and further in view of the additional limitations in the dependent claims.

Claim 32, as amended, recites in pertinent part, "A computer-readable medium containing instructions for controlling a computer system to deliver an electronic message, by...determining whether after sending of the electronic message to a recipient a pre-determined period of time has elapsed without receiving a confirmation that the recipient reviewed the sent electronic message, *the predetermined time period corresponding to a time interval selected by a sender*; and...when it is determined that the period of time has elapsed without receiving the confirmation, *sending another electronic message*." (Emphasis added). Again, Birdwell does not disclose that the time period corresponds to a time interval that is selected by the user. Cox also fails to provide this. Claim 32 is also allowable. Claims depending from claim 32 are also allowable based upon the allowable form of the base claim and further in view of the additional limitations in the dependent claims.

Finally, claim 36 as amended recites: "A computer system for ensuring that an electronic message is reviewed by a recipient, comprising...a message sender for receiving an indication of the recipient for the electronic message and for sending the electronic message to

the recipient...a message tracker for determining whether the recipient within a specified amount of time reviewed the electronic message sent by the message sender; and...a message processor for automatically *resending the electronic message* when the message tracker determines that the recipient did not review the sent electronic message within the specified amount of time. (Emphasis added). Again, the cited art does not disclose this. In particular, the Miyamoto reference fails to disclose resending the message that was initially sent. Instead, Miyamoto discloses sending a *created* message instead of resending the message as originally sent. Claim 36 is therefore allowable. Claims depending from claim 36 are also allowable based on the allowable form of the base claim and further in view of the additional limitations recited in the dependent claims.

In light of the foregoing amendments and remarks, Applicant believes that pending claims 1-38 are in condition for allowance, and that action is respectfully requested. If there are any remaining matters that can be handled in a telephone conference, the Examiner is invited to telephone the undersigned attorney, Steven H. Arterberry, at (206) 903-8787.

Respectfully submitted,
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